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Daniel Ruberman* (ruberman@brandeis.edu), Brandeis University, Department of Mathematics, MS 050, 415 South Street, Waltham, MA 02454. *A Levine-Tristram invariant for knotted tori.*

In 1969, Tristram and Levine independently introduced an integer-valued function $\sigma_\alpha(K)$ of a knot, where α is a unit complex number. It gives rise to a concordance invariant that in turn shows that the concordance group is infinitely generated. I will explain a generalization of this invariant to the setting where the 3-sphere is replaced by $X =$ a homology $S^1 \times S^3$, and the knot is replaced by an embedded torus (that carries the first homology). In the classical setting, $\frac{1}{2}\sigma_{\alpha^2}(K)$ is equal to a count of irreducible $SU(2)$ representations on the knot complement with holonomy α on the meridian. A similar count of representations, for embedded tori, was introduced last year by Echeverria. While our invariant is equal in some cases to (a normalized version of) Echeverria's, I will give examples to show that the two are not equal in general. (Received August 26, 2020)